

**Notice of Allowability**

Application No.

10/773,411

Applicant(s)

MAEDA, TAKESHI

Examiner

Art Unit

LaTanya Bibbins

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed August 14, 2007.
2. ☒ The allowed claim(s) is/are 7-9 (to be renumbered 1-3).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER

### DETAILED ACTION

1. In the remarks filed on August 14, 2007, Applicant amended claims 7-9, cancelled claims 1-6, and submitted arguments for allowability of pending claims 7-9.

### *Allowable Subject Matter*

2. Claims 7-9 are allowed.
3. The following is an examiner's statement of reasons for allowance:

**Regarding claim 7-9**, none of the references of record, alone or in combination, suggest or fairly teach the limitations of independent claim 8 in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to disclose an information playback method for reading out information by irradiating an optical spot on an information recording medium having a plurality of tracks, said method comprising the steps of: irradiating said optical spot simultaneously on a first track and a second track adjacent to said first track, among said plurality of tracks; and maintaining an orthogonal relation with a depth of a recorded mark recorded on said first track and a depth of a recorded mark recorded on said second track, when both the recorded marks are converted to electric signals, wherein when a readout signal from said first track is S1 and a readout signal from said second track is S2, frequencies of carrier waves of said S1 and said S2 are equal frequency but both phases are deviated by 90 degrees from each other, **information bits "1" and "0" of said S1 are deviated by 180 degrees in phases, and information bits "1" and "0" of said S2 are deviated by 180 degrees in phases.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Citation of Relevant Prior Art***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Hayashi (US Patent Number 6,545,965 B1)** discloses a recording medium for recording digital information including a substrate member, a plurality of recording tracks formed on the substrate member, and a plurality of pits formed on the recording tracks. In the recording medium, the pits are arranged in a fixed period, the position of an edge of each pit is changed in accordance with the digital information to be recorded in the recording medium, and the phase of the train of the pits formed on one of the recording tracks and the phase of the train of the pits formed on another one of the recording tracks adjacent to the one of the recording tracks are shifted each other by half of the fixed period. When reproducing digital data from the optical disk, the reproduction apparatus radiates the reproduction laser beam on the pits formed on adjacent tracks. The pit trains are 180 degrees out of phase between adjacent tracks.

**Van Kesteren (US PGPub 2004/0252623 A1)** discloses an information layer of an optical record carrier according to the invention. The tracks of the record carrier comprise broad marks and narrow marks in the form of pits having a first width and a

second width larger than the first width, respectively. Within one track the width is constant and the widths in adjacent tracks differ. The varying length of the marks and of the spaces between the marks represent the information recorded, similar to the way in which information is recorded on conventional CD-ROM discs. When a scanning spot follows a track, its width is larger than the track pitch, causing the spot to cover both first and second tracks.

**Tanaka et al. (US PgPub 2002/0110080 A1)** disclose an optical recording disk which records information using lands and grooves and has a shallow & deep groove structure in which groove is different in depth from the other groove adjacent thereto.

### ***Conclusion***

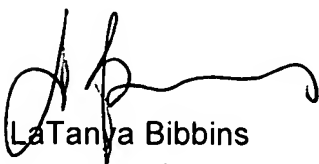
Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

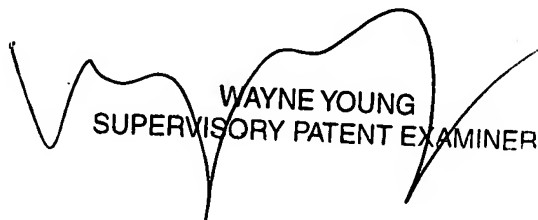
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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